

# HT232/HT232L CHT232B/CHT232L

# HEDGE-TRIMMER

Owner/Operator Manual and Service Parts List

#### **IMPORTANT:**

Before operating your RedMax product, read this manual carefully and completely. This manual will provide you with full understanding of the necessary instructions for assembly, operation and maintenance of the equipment. For continued safe and reliable operation, use only parts bearing the RedMax mark. Adhere to all notes and warnings.

### FOR SAFE OPERATION

#### KNOW YOUR UNIT

- Read this Owner's Manual carefully until you completely understand and can follow all safety rules, precautions, and operating instructions before operating the unit.
- Restrict your unit to users who understand and follow all safety rules, precautions, and operating instructions found in this manual. Children should not be allowed to operate this unit.

#### PLAN AHEAD

- Dress in a long-sleeved shirt and long pants. Wear protective gloves and shoes. Use adequate gears to protect your eyes and ears. Do not wear loose clothing, jewelry, short pants or sandals. Do not go bearfoot.
- Guard against hazardous situations at all times. Warn adalts to keep pets and children away from the work area. Establish a safe method for gaining your attention during operation. Be careful if you are approached.
- Do not operate the unit when you are tired, ill or upset; or if you are under the influence of alcohol, drugs, or medication.
- 4. Inspect the work site before each use. Remove all debris and objects that could be thrown, become entangled in the cutting head, or cause damage during operation.

#### **HANDLE FUEL WITH CAUTION**

- Eliminate all sources of sparks or flame (including smoking, open flames, or work that could cause sparks) in the area where fuel is mixed, poured, or stored.
- Mix, pour, and store fuel in an approved, marked container and in a well ventilated area.
- Be sure to stop the engine before refueling the unit.
- Do not smoke while handling fuel or while operating the unit.
- Wipe up all spills before starting the engine.
   Move at least 10 feet (3 meters) away from fuel and refueling site before starting the engine.

#### OPERATE YOUR UNIT SAFELY

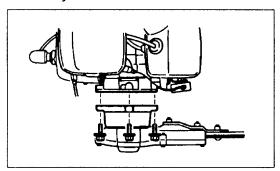
- 1. Inspect the entire unit before each use for worn, loose, or damaged parts. Do not use until the unit is in proper working order.
- 2. Keep the handles free of oil and fuel.
- 3. Never start or run the engine inside a closed room or building. Exhaust fumes contain dangerous carbon monoxide.
- Keep the engine idle speed adjusted properly so that the cutting head comes to a complete stop when trigger is released.
- 5. Be sure to stop the engine before refueling, inspecting or leaving the unit unattended.
- 6. Always use both hands to hold the unit.
- Do not use any accessory or attachment other than those bearing the RedMax mark and recommended for the unit.

#### MAINTAIN YOUR UNIT PROPERLY

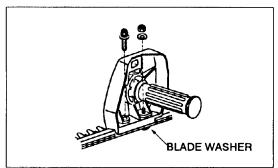
- Disconnect the spark plug before performing all maintenance except for carburetor adjustment.
- Use only recommended, genuine replacement parts to avoid creating hazard and/or voiding your warranty.
- 3. When transporting or storing the unit, drain fuel from the fuel tank.
- 4. Do not store the unit or fuel in a closed area where fuel vapors can reach an open flame from hot water heaters, furnaces, and so on.
- Store the unit in a dry area out of the reach of children.
- 6. All engine service, other than those explained in this manual, should be performed by competent service personnel. Improper service to the muffler and flywheel could cause serious accidents.

## SETUP for HT232/HT232L

- 1. Join the engine unit to the clutch housing of the cutter unit, with the fuel tank on the blade side.
- 2. Align the mounting holes and fix the engine securely with the 3 screws.



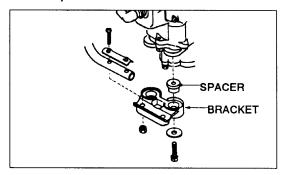
- 3. Remove the right handle mounting screw, nut, and washer casually attached on the blade beam.
- 4. Set the right handle on the beam as the grip comes to the opposite side of the cutting teeth, and fix with the hardware removed before. When fastening the nut, hold the screw to keep the blade washer loose.



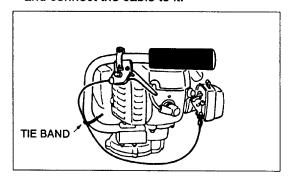
#### [NOTE]

To assure designed cutting performance, always keep a half spare turn for the blade screws. It will cause blade seizure and premature wear of the clutch system if they are too tight. Too loose screws will make the gap between the blades large, and result in poor cutting performance.

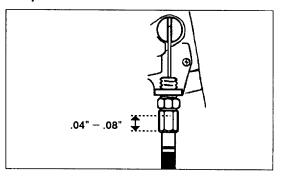
- 5.Fix the left handle to the bracket using the hardware provided.
- 6. Install the handle assembly to the clutch housing with the spacers inserted as shown in the picture.



Attach the throttle lever to the left handle, and connect the cable to it.

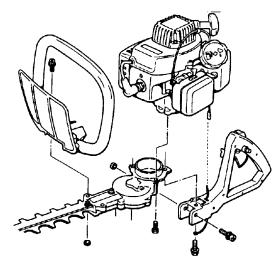


8. Check the cable play and, if necessary, adjust between .04" and .08".

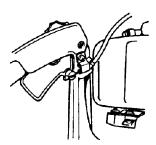


# SETUP for CHT232B/CHT232L

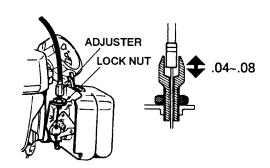
- 1. Join the engine unit onto the clutch housing of the cutter unit. Casually fix the front 2 points with the screws(.55" long).
- After connecting the ground wire, install the rear handle to the clutch housing with the screw(2" long) and the nut.
- 3. Put the screw(1.6" long) through the ground wire terminal and the rear handle, screw in to the engine mounting base. Securely tighten all of the engine mounting screws.
- Attach the front handle onto the gear housing and fasten with 2 screws(1.2" long) and nuts.



5. Connect the throttle cable with the lever on the rear handle, and fix the end with the hardware attached to the handle.



7. Adjust the cable play to .04 ~ .08.



# **FUEL**

The engines of HT232 and CHT232 are lubricated by oil specially formulated for air-cooled 2-cycle gasoline engine use. If RedMax oil is not available, use an anti-oxidant added quality oil expressly labeled for air-cooled 2-cycle engine use.

# RECOMMENDED MIXING RATIO GASOLINE 32: OIL 1

#### [WARNING!!]

The fuel is highly flammable. Do not smoke or bring any flame or sparks near fuel.

#### HOW TO MIX FUEL

- Measure out the quantities of gasoline and oil to be mixed.
- 2. Put some of the gasoline into a clean, approved fuel container.
- 3. Pour in all of the oil and agitate well.
- 4. Pour in the rest of gasoline and agitate again for at least one minute.
- Put a clear indication on the outside of the container to avoid mixing up with gasoline or other containers.

#### **■ FUELING THE UNIT**

- 1. Untwist and remove the fuel cap. Rest the cap on a dustless place.
- 2. Put fuel into the fuel tank to 80% of the full capacity.
- 3. Fasten the fuel cap securely and wipe up any fuel spillage around the unit.

#### [CAUTION!]

- 1. Select bare ground for fueling.
- 2. Move at least 10 feet (3 meters) away from the fueling point before starting the engine.
- 3. Stop the engine before refueling the unit.

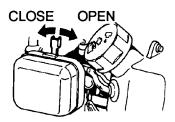
#### FOR YOUR ENGINE LIFE, AVOID;

- FUEL WITH NO OIL(RAW GASOLINE) It will give severe damage to the engine inner parts very quickly.
- GASOHOL It can cause deterioration of rubber and/or plastic parts and disruption of engine lubrication.
- 3. OIL FOR 4-CYCLE ENGINE USE or WATER COOLED 2-CYCLE ENGINE USE It can cause spark plug fouling, exhaust port blocking, or piston ring sticking.

## **OPERATION**

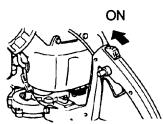
#### **■ STARTING ENGINE**

- 1. Rest the unit on a flat, firm place. Keep the blades clear of the surrounding as it will start rotating upon starting of the engine.
- When first starting up after putting fuel into the machine, push the priming pump until fuel runs out in the clear tube. Then close the choke. Choking may not be necessary when re-starting right after stopping the engine.



- 3. Pull the throttle lever and push the lock button to set the lever in the START position.
- 4. [CHT232B/CHT232L only]

Slide the ignition switch to the engine side to set it in the ON position.



5. While holding the unit with your left hand on the starter housing, pull the starter knob quickly.

#### [NOTE]

Avoid pulling the rope to its dead end or returning it by releasing the knob. Such actions can cause starter failures.

- 6. When the engine has started, gradually open the choke.
- 7. Allow the engine to warm up for a half minute before starting operation.

#### [NOTE]

 If the engine won't start after several attempts, open the choke and repeat pulling the rope or remove the spark plug and dry it.

#### **STOPPING ENGINE**

- 1. Release the throttle trigger and run the engine for a half minute.
- 2. Stop the engine by the stop switch.

(HT232/HT232L) Press on the stop button until the engine stops completely.

STOP BUTTON



**CHT232B/CHT232L** ) Shift the ignition switch to the STOP position.



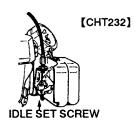
#### [NOTE]

Except for an emergency, avoid stopping the engine while pulling the trigger.

#### ■ ADJUSTING IDLING SPEED

- When the engine tends to stop frequently at idling mode, turn the idle set screw clockwise.
- When the cutting head keeps rotating after releasing the trigger, turn the idle set screw counter-clockwise.





#### [NOTE]

Warm up the engine before adjusting the idling speed.

#### HOW TO USE

- This machine is designed so as to cut twigs upto 8 mm(0.3 inches) thick. Cutting too thick twigs or metal wires can not only break the blade teeth but also give damage to the drive mechanism.
- When trimming leaves and thin twigs, guide the blades as drawing a half circle on the surface, and you will get a better finish.
- ☐ Running the engine at high speed with the blades jammed up can shorten the life of clutch parts. When the blades have been jammed by thick twigs, stop operation once and draw your unit off the objects after stopping the engine. When clipping comparatively thick twigs, move your unit slowly back and forth like a saw, and they can be cut to fine finish.

#### [NOTE]

When a new unit is first operated, in the first few minutes grease may come out of the gear case. But, since this is excess grease, there is no cause for alarm. For next use just wipe it off with the engine stopped.

## MAINTENANCE

WARNING: Make sure to stop the engine before inspecting and servicing the unit.

#### **■ DAILY INSPECTION**

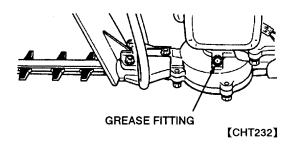
- Check all the fasteners for getting loose or missing.
- Brush off dirt on the blades and smear oil.

#### [NOTE]

The blades are loose-installed to the guide bar with several screws and nuts. Do not tighten up those screws, or the blades will be locked and result in clutch failures. Allow the screws a half spare turn, and secure there with the nut(See NOTE on page 4).

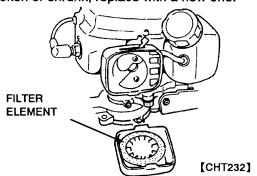
#### **■ GEAR CASE**

At every 25 hours of use, supply grease to the gearcase. Pump in grease via the grease fitting until it comes out of the root of blades.



#### **AIR FILTER**

The air filter, if clogged, will reduce the engine performance. Monthly check and clean the filter element in warm, soapy water as required. Dry completely before installing. If the element is broken or shrunk, replace with a new one.



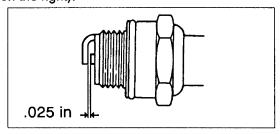
#### FUEL FILTER

When the engine runs short of fuel supply, check the fuel cap and the fuel filter for blockage.

#### SPARK PLUG

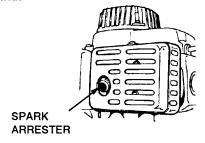
Starting failure and mis-firing are often caused by a fouled spark plug. Periodically clean the spark plug and check that the spark gap is in the correct range.

For a replacement plug, use the correct type specified by RedMax (See SPECIFICATIONS on the right).



#### ■ SPARK ARRESTER

RedMax engines are equipped with a spark arresting screen at the exhaust port. Periodically check and keep it in good condition. In the State of California it is required by law(Section 4442 of the California Public Resources Code)to equip a spark arrester when a gas powered tool is used in any forest covered, brush covered, or grass covered unimproved land.



#### **STORAGE**

Old fuel left in the carburetor may cause starting failure. Before storing the unit, empty the fuel tank and drain the carburetor with the priming pump equipped on it.

## **SPECIFICATIONS**

| HT232  | [HT232L] |
|--------|----------|
| 111232 |          |

| Type ···Reciprocating double-sided dual blades Blade size ········ 23.6 [30] (in) Dry weight ········· 11.5 [12] (lbs) Engine Type ······Air-cooled 2-stroke gasoline Model ········ Zenoah G2D Displacement ······· 22.5(cc) Max. output ······ 1.2 (HP)at 7500rpm Fuel ······· Mixture(Gasoline32:Oil1) Carburetor ··· Walbro Diaphragm type Spark plug ····· Champion RCJ8 Fuel tank capacity ····· 20(fl.oz) Transmission |
|---|
| Centrifugal clutch, Cam-crank Reduction ratio 4.14  |
|   |

Specifications are subject to change without notice.

# SERVICE PARTS LIST

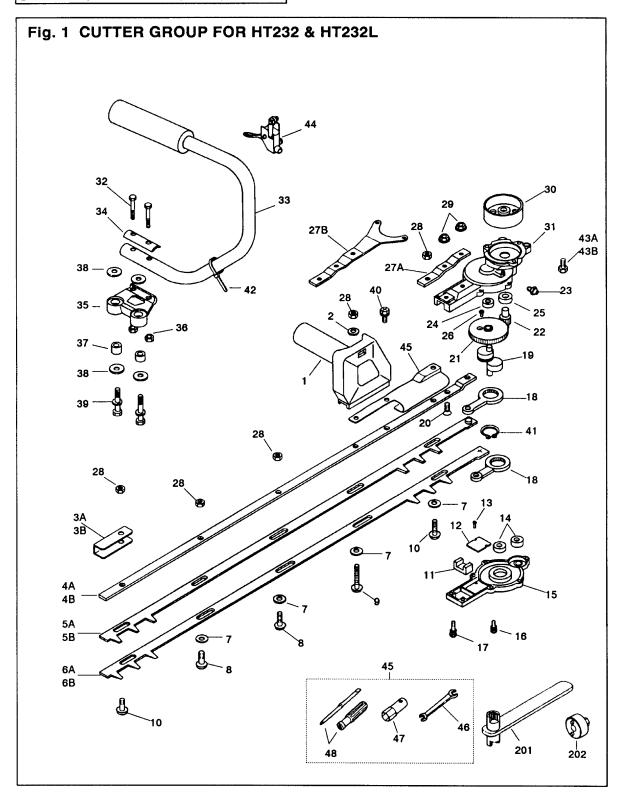


Fig.1 CUTTER GROUP FOR HT232 & HT232L

| ЗА         | Description  Right handle comp.  Washer Reinforce | Part Number<br>3883-12101 | 232        | 'ty<br>232L<br>1 | Note                           |
|------------|---|---------------------------|------------|------------------|--------------------------------|
| 2<br>3A    | Washer  | 3883-12101                | 1          |                  | 1                              |
| ЗА         |   | 0000 1015-                |            | 1                |                                |
| 1 1        |   | 3883-12130<br>3880-11750  | 1          | 1                |                                |
| 3D         | Reinforce   | 3885-11750                |            | 1                |                                |
| 4A         | Guide plate                                       | 3883-11610                | 1          | -                |                                |
| 4B         | Guide plate                                       | 3927-11610                | -          | 1                |                                |
| 5A<br>5B   | Upper blade<br>Upper blade                        | 3880-11720<br>3927-11720  | 1 _        | 1                |                                |
| BA         | Lower blade                                       | 3880-11730                | 1          |                  |                                |
| 6B         | Lower blade                                       | 3927-11730                | -          | 1                |                                |
| 7          | Washer  | 3880-11780                | 4          | 5                |                                |
| 8 9        | Screw, 19mm long<br>Screw, 29mm long              | 3884-11750<br>6095-11810  | 2          | 3                |                                |
| 10         | Screw, 22mm long                                  | 3884-11660                | 2          | 2                |                                |
| 11         | Felt  | 3873-11320                | 1          | 1                |                                |
| 12<br>13   | Plate<br>Screw                                    | 3880-11340<br>0260-00305  | 1 2        | 1 2              |                                |
| 14         | Bearing   | 06001-00608               | 2          | 2                |                                |
| 15         | lower case  | 3873-11210                | 1          | 1                |                                |
| 16         | Bolt  | 0225-10516                | 5          | 5                |                                |
| 17<br>18   | Bolt<br>Rod                                       | 0225-10520<br>3873-11500  | 2 2        | 2 2              |                                |
| 19         | Crankshaft  | 3886-11450                | 1          | 1                |                                |
| 20         | Screw   | 3873-11630                | 2          | 2                |                                |
| 21         | Gear  | 3884-11440                | 1          | 1                |                                |
| 22 23      | Pinion<br>Fitting                                 | 3884-11420                | 1 1        | 1                |                                |
| 24         | Bearing   | 3199-13350<br>06001-00608 | '          | 1                |                                |
| 25         | Bearing   | 06004-06001               | 1          | 1                |                                |
| 26         | Screw   | 3873-11460                | 1          | 1                |                                |
| 27A<br>27B | Plate<br>Plate                                    | 3876-11670<br>3927-11670  | 1 _        | 1                |                                |
| 28         | Nut   | 3880-11790                | 5          | 8                |                                |
| 29         | Nut   | 3880-11140                | 2          | 2                |                                |
| 30         | Clutch drum                                       | 3884-11410                | 1          | 1                |                                |
| 31         | Upper case<br>Bolt                                | 3887-11110<br>0212-50350  | 1 2        | 1 2              |                                |
| 33         | Left handle comp.                                 | 3887-13100                | 1          | 1                |                                |
| 34         | Plate   | 6095-13310                | 1          | 1                |                                |
| 35         | Bracket   | 6095-13320                | 1          | 1                |                                |
| 36<br>37   | Nut<br>Collar                                     | 3876-14470<br>6095-13330  | 2 2        | 2 2              |                                |
| 1 1        | Washer  | 6095-13360                | 4          | 4                |                                |
| 39         | Bolt  | 0225-10625                | 2          | 2                |                                |
| 40         | Bolt  | 3883-12140                | 1          | 1                |                                |
| 41         | Snap ring<br>Band                                 | 04064-02512<br>3880-13350 | 1 1        | 1                |                                |
| 43A        | Bolt  | 0225-10614                | 3          |                  |                                |
| 43B        | Bolt  | 0225-10618                | -          | 3                |                                |
|            | Lever ass'y                                       | 3881-13210                | 1          | 1 .              |                                |
| 45<br>45   | Protector<br>Tool set                             | 3887-91170<br>1111-91003  | 1          | 1 1              |                                |
| 48         | Spanner   | 3540-91120                | ;          | ;                |                                |
| 47         | Socket  | 1110-91320                | 1          | 1                |                                |
| 48         | Screwdriver                                       | 1030-91340                | 1          | 1                |                                |
|            |   |                           |            |                  |                                |
|            | Wrench<br>Wrench                                  | 3880-95020<br>3880-95010  | (1)<br>(1) | (1)<br>(1)       | Optional part<br>Optional part |

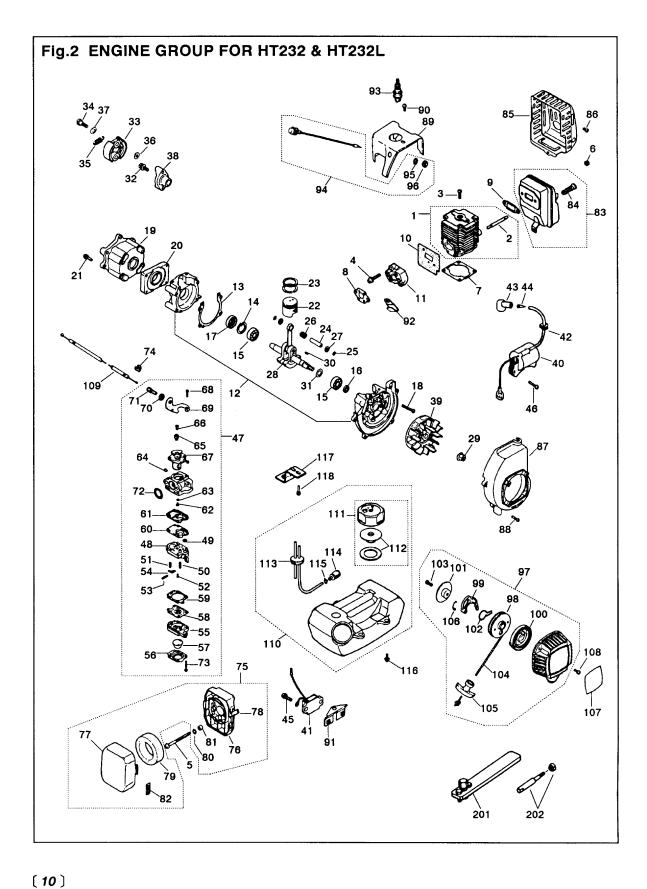


Fig.2 ENGINE GROUP FOR HT232 & HT232L

| Key<br>No. | Description               | Part Number              | Q'ty | Note   | Key<br>No. | Description  | Part Number              | Q'ty | Note          |
|------------|---------------------------|--------------------------|------|--------|------------|--|--------------------------|------|---------------|
| 1          | Cylinder comp.            | 1140-12100               | 1    |        | 67         | Valve ass'y  | 1881-81150               | 1    |               |
| 2          | Stud                      | 1140-12150               | 2    |        | 68         | Screw  | 1752-81110               | 2    |               |
| 3          | Screw                     | 0280-10518               | 4    |        | 69         | Bracket  | 1891-81130               | 1    |               |
| 4          | Screw                     | 0280-30520               | 2    |        | 70         | Nut  | 1751-81180               | 1    |               |
| 5          | Screw                     | 0260-30555               | 2    |        | 71         | Screw  | 1918-81170               | 1    |               |
| 8          | Nut                       | 3320-15310               | 2    |        | 72         | Ring   | 1881-81130               | 1 4  |               |
| 7 8        | Gasket<br>Gasket          | 1140-13120<br>1750-13131 | 1 1  |        | 73         | Screw<br>Cap   | 1850-81530               | 1    |               |
| 9          | Gasket                    | 1140-13140               | i    | İ      | 75         | Cleaner ass'y  | 1601-81810<br>1751-82002 | ;    |               |
| 10         | Gasket                    | 1750-13150               | i    |        | 76         | Housing  | 1751-82012               | ;    |               |
| 11         | Insulator                 | 1750-13161               | i    |        | 77         | Cover  | 1751-82041               | ;    |               |
| 12         | Crankcase comp.           | 1772-21101               | 1    |        | 78         | Lever  | 1750-82070               | i    |               |
| 13         | Gasket                    | 1140-21140               | 1    |        | 79         | Filter   | 1750-82020               | 1    |               |
| 14         | Snap ring                 | 04065-02812              | 1    |        | 80         | Washer   | 1750-82080               | 1    |               |
| 15         | Bearing                   | 06030-06001              | 2    |        | 81         | Sleeve   | 1750-82060               | 2    |               |
| 16         | Seal                      | 1140-21210               | 1    |        | 82         | Label  | 1133-82060               | 1    |               |
| 17         | Seal                      | 1850-21220               | 1    |        | 83         | Muffler ass'y  | 1751-15101               | 1    |               |
| 18         | Screw                     | 0260-00530               | 4    |        | 84         | Arrester   | 1601-15120               | 1    |               |
| 19         | Case                      | 1779-21160               | 1    |        | 85         | Cover  | 1751-15210               | 1    |               |
| 20         | Plate                     | 1772-56111               | 1    | }      | 86         | Screw  | 0280-20408               | 3    |               |
| 21         | Screw                     | 0280-30525               | 4    | ŀ      | 87         | Cover  | 1140-31111               | 1    |               |
| 22         | Piston                    | 1140-41110               | 1 2  | ļ      | 88         | Screw  | 0260-00414               | 4    |               |
| 23         | Piston ring<br>Piston pin | 1100-41210<br>1101-41310 | 1    |        | 89         | Cover<br>Screw   | 1140-32211<br>0260-20408 | 1 2  |               |
| 25         | Snap ring                 | 1260-41320               | 2    |        | 91         | Bracket  | 1750-72241               | 1    |               |
| 26         | Bearing                   | 1140-41330               | 1    |        | 92         | Clamp  | 1140-72231               | 1    |               |
| 27         | Washer                    | 1101-41340               | 2    | i      | 93         | Spark plug   | 1115-73111               | i    | RCJ8          |
| 28         | Crankshaft comp.          | 1150-42001               | 1    |        | 94         | Switch ass'y   | 1120-72201               | 1    | 11000         |
| 29         | Nut                       | 1650-43230               | 1    |        | 95         | Washer   | 1520-72220               | i    |               |
| 30         | Key                       | 1000-43240               | 1    |        | 96         | Nut  | 1520-72230               | 1    |               |
| 31         | Shim                      | 1140-43250               | 0-1  |        | 97         | Starter ass'y  | 1140-75101               | 1    |               |
| 32         | Bolt                      | 0224-30614               | 1    |        | 98         | Reel   | 1140-75211               | 1    |               |
| 33         | Shoe                      | 1140-51110               | 2    |        | 99         | Ratchet  | 1130-75230               | 1    |               |
| 34         | Screw                     | 1140-51250               | 2    |        | 100        | Spring   | 1130-75220               | 1    |               |
| 35         | Spring                    | 1122-51221               | 1    |        | 101        |  | 1130-75241               | 1    |               |
| 36         | Washer                    | 1140-51230               | 2    |        | 102        | , · ·  | 1130-75251               | 1    | i             |
| 37<br>38   | Washer<br>Plate           | 1140-51242               | 2    |        | 103        | The state of the s | 1130-75260               | 1    |               |
| 38         | Rotor                     | 1772-55310               | 1    |        | 104        | Rope<br>Knob   | 1140-75311               | !    |               |
| 40         | Coil                      | 1750-71110<br>1750-71120 | 1    |        | 105        |  | 1140-75320               | 1    |               |
| 41         | Unit                      | 1750-71120               | 1    |        | 107        | ' '  | 1140-75270<br>1710-75410 | 1    |               |
| 42         | Grommet                   | 1140-72110               | 1    |        | 108        |  | 0260-30412               | 4    |               |
| 43         | Сар                       | 1100-72213               | 1    |        | 109        |  | 1751-82100               | 1    |               |
| 44         | Spring                    | 1900-72120               | 1    |        | 110        |  | 1710-85000               | l i  |               |
| 45         | Screw                     | 0260-20512               | 2    | !      | 111        | Cap ass'y  | 1601-85200               | i    |               |
| 46         | Screw                     | 0260-10420               | 2    | 1      | 112        |  | 1600-85302               | i    |               |
| 47         | Carburetor ass'y          | 1794-81000               | 1    | WYJ-81 | 113        |  | 1710-85600               | 1    |               |
| 48         | Pump body                 | 1794-81450               | 1    |        | 114        | Filter ass'y   | 1850-85300               | 1    |               |
| 49         | Screen                    | 3306-81380               | 1    |        | 115        |  | 1260-85460               | 1    |               |
| 50         | Inlet valve               | 3358-81310               | 1    |        | 116        |  | 1750-86120               | 3    | 1             |
| 51         | Spring                    | 1794-81270               | 1    |        | 117        | L  | 1772-86223               | 1    |               |
| 52         | Screw                     | 1850-81220               | 1    |        | 118        | Screw  | 0260-30512               | 1    |               |
| 53         | Pin                       | 3310-81250               | 1    |        |            |  |                          | 1    |               |
| 54         | Lever                     | 3310-81230               | 1    |        |            |  |                          |      |               |
| 55<br>56   | Air purge body            | 1850-81490               | 1    | İ      |            |  | 1                        |      |               |
| 57         | Pump cover<br>Primer pump | 1850-81250<br>1751-81510 | 1    |        |            |  |                          |      |               |
| 58         | Metering diaphragm        | 3310-81260               | ;    |        |            |  |                          |      |               |
| 59         | Gasket                    | 1850-81470               | 1    |        |            |  |                          |      |               |
| 60         | Pump diaphragm            | 1085-81420               | 1    | İ      |            |  |                          |      |               |
| 61         | Gasket                    | 1065-81410               | 1    |        |            |  |                          |      |               |
| 62         | Jet                       | 1850-81250               | i    | #43    |            |  |                          |      |               |
| 63         | O-ring                    | 1751-81240               | i    | ·      |            |  | Ì                        |      |               |
| 64         | Ring                      | 1751-81130               | 1    |        |            |  |                          |      |               |
| 65         | Swivel                    | 1881-81140               | 1    |        | 201        | Puller ass'y   | 1140-96100               | 1    | Optional part |
| 66         | Plug                      | 1881-81160               | 1    |        | 202        | Piston pin guide   | 1101-96220               | 1    | Optional part |
|            |                           |                          |      |        |            |  |                          | 1    |               |
|            |                           |                          |      |        | Ь          |  |                          | 1    | l             |

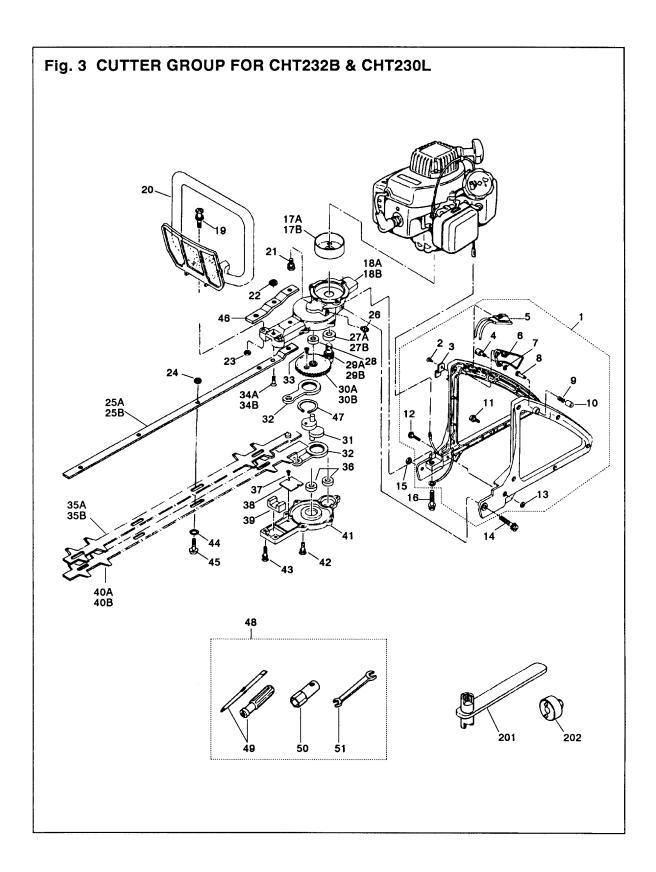


Fig.3 CUTTER GROUP FOR CHT232B & CHT232L

|            | g.3 CUTTER                         | <u> </u>                   |           |             |               | _ |
|------------|------------------------------------|----------------------------|-----------|-------------|---------------|---|
| Key<br>No. | Description                        | Part Number                | Q<br>232B | 'ty<br>232L | Note          |   |
| 1          | Rear handle ass'y                  | 3873-13100                 | 1         | 1           |               |   |
| 2          | Screw, M4x10                       | 3873-13180                 | 1         | 1           |               |   |
| 3          | Plate                              | 3873-13170                 | 1         | 1           |               |   |
| 4          | Cable end                          | 3873-13210                 | 1         | 1           |               |   |
| 5          | Switch ass'y                       | 3873-13130                 | 1         | 1           |               |   |
| 6          | Throttle lever                     | 3873-13220                 | 1         | 1           |               |   |
| 7          | Snap ring                          | 3873-13230                 | 1         | 1           |               |   |
| 8          | Pin                                | 3873-13140                 | 1         | 1           |               |   |
| 9          | Spring                             | 3873-13150                 | 1         | 1           |               |   |
| 10         | Cap                                | 3873-13160                 | 1         | 1           |               |   |
| 11<br>12   | Screw, M4x16<br>Screw, M4x30       | 3873-13240<br>3873-13250   | 5         | 5<br>1      |               |   |
| 13         | Nut, M6                            | 0280-10403                 | 6         | 6           |               |   |
| 14         | Bolt, M6x50                        | 0225-50850                 | 1         | 1           |               |   |
| 15         | Nut, M6                            | 0280-10805                 | 1         | 1           |               |   |
| 16         | Bolt, M6x40                        | 0225-50840                 | i         | i           |               |   |
| 17A        | Clutch drum                        | 3880-11410                 | 1         | _           |               |   |
| 17B        | Clutch drum                        | 3884-11410                 | _         | 1           |               |   |
| 18A        | Middle case                        | 3873-11110                 | 1         | _           |               |   |
| 18B        | Middle case                        | 3929-11110                 | -         | 1           |               |   |
| 19         | Bolt, M6x35                        | 0225-50635                 | 2         | 2           |               |   |
| 20         | Front handle                       | 3873-12101                 | 1         | 1           |               |   |
| 21         | Bolt, M6x14                        | 0225-10614                 | 2         | 2           |               |   |
| 22         | Nut, M5                            | 3880-11140                 | 2         | 2           | •             |   |
| 23         | Nut, M6                            | 0280-10605                 | 2         | 2           |               |   |
| 24         | Nut, M6U                           | 3880-11790                 | 4         | 5           |               |   |
| 25A        | Guide plate                        | 3873-11610                 | 1         | -           |               |   |
| 25B        | Guide plate                        | 3929-11610                 | _         | 1           |               |   |
| 26         | Grease fitting                     | 3199-13350                 | 1         | 1           |               |   |
| 27A        | Bearing, 6000 2RS                  | 08004-08000                | 1         | -           |               |   |
| 27B<br>28  | Bearing, 6001 2RS<br>Bearing, 608Z | 06004-06001<br>06001-00608 | 1         | 1           |               |   |
| 29A        | Pinion                             | 3873-11420                 | 1         | <u> </u>    |               |   |
| 29B        | Pinion                             | 3884-11420                 | <u>'</u>  | 1           |               |   |
| 30A        | Gear                               | 3873-11440                 | 1         | <u>'</u>    |               |   |
| 30B        | Gear                               | 3884-11440                 |           | 1           |               |   |
| 31         | Crankshaft                         | 3886-11450                 | 1         | i           |               |   |
| 32         | Rod ass'y                          | 3873-11500                 | 2         | 2           |               |   |
| 33         | Screw, M5x10                       | 3873-11460                 | 1         | 1           |               |   |
| 34A        | Screw, M5x16                       | 3874-11630                 | 2         | _           |               |   |
| 34B        | Screw, M5x20                       | 3873-11630                 | -         | 2           |               |   |
| 35A        | Upper blade                        | 3879-11720                 | 1         | -           |               |   |
| 35B        | Upper blade                        | 3929-11720                 | _         | 1           |               |   |
| 36         | Bearing, 608Z                      | 06001-00608                | 2         | 2           |               |   |
| 37         | Screw, M3x5                        | 0260-00305                 | 2         | 2           |               |   |
| 38         | Plate                              | 3880-11340                 | 1         | 1           |               |   |
| 39         | Felt                               | 3873-11320                 | 1         | 1           |               |   |
| 40A        | Lower blade                        | 3879-11730                 | 1         | -           |               |   |
| 40B        | Lower blade                        | 3929-11730                 | -         | 1           |               |   |
| 41         | Lower case                         | 3873-11210                 | 1         | 1           |               |   |
| 42         | Bolt, M5x16                        | 0225-10518                 | 5         | 5           |               |   |
| 43         | Bolt, M5x20                        | 0225-10520                 | 2         | 2           |               |   |
| 44         | Washer                             | 3873-11760                 | 4         | 5           |               |   |
| 45<br>48   | Screw, M6x19<br>Plate              | 3873-11750                 | 4         | 5           |               |   |
| 46<br>47   | Snap ring                          | 3876-11670<br>04064-02512  | 1         | 1           |               |   |
| 48         | Tool set                           | 1111-91003                 |           |             |               |   |
| 49         | Screwdriver                        | 1030-91340                 | 1         |             |               |   |
| 50         | Socket, Hex 3/4"                   | 1110-91320                 |           |             |               |   |
| 51         | Spanner, 8x10                      | 3540-91120                 |           |             |               |   |
|            |                                    |                            |           |             |               |   |
|            | Wrench                             | 3880-95020                 | (1)       | (1)         | Optional part |   |
| 201        | Wrench                             | 3880-95010                 | (1)       | (1)         | Optional part |   |

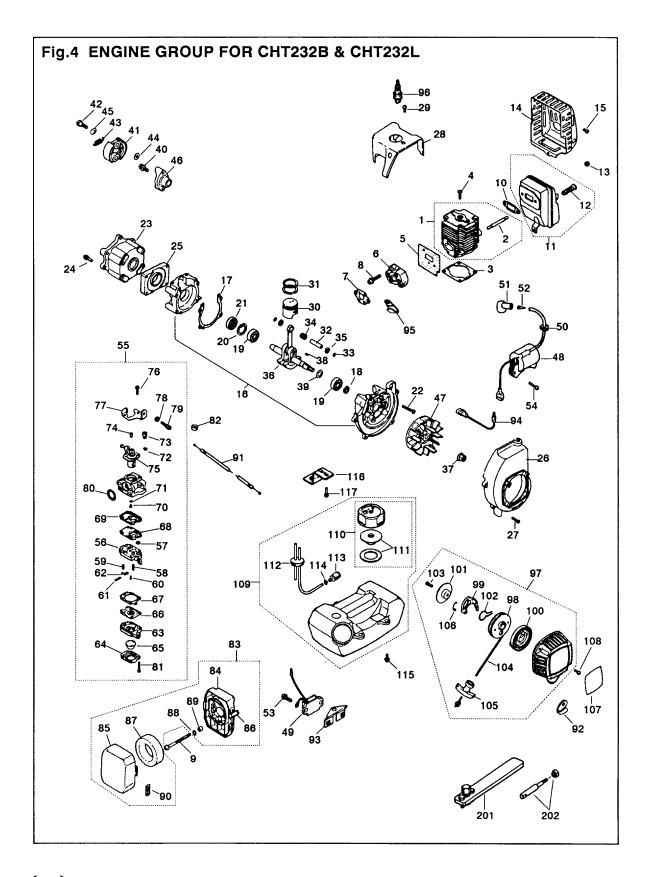


Fig.4 ENGINE GROUP FOR CHT232B & CHT232L

| Key<br>No. | Description                  | Part Number               | Q'ty | Note     | Key<br>No. | Description                      | Part Number  | Q'ty | Note          |
|------------|------------------------------|---------------------------|------|----------|------------|----------------------------------|--|------|---------------|
| 1          | Cylinder comp.               | 1140-12100                | 1    |          | 66         | Metering diaphragm               | 3310-81260   | 1    |               |
| 2          | Stud                         | 1140-12150                | 2    | j        | 67         | Gasket                           | 1850-81470   | 1    |               |
| 3          | Gasket                       | 1140-13120                | 1    |          | 68         | Pump diaphragm                   | 1065-81420   | 1    |               |
| 4          | Screw                        | 0260-10516                | 4    |          | 69         | Gasket                           | 1065-81410   | 1    |               |
| 5          | Gasket<br>Insulator          | 1750-13150                | 1    |          | 70         | Jet                              | 1850-81250   | 1    | #43           |
| 7          | Gasket                       | 1750-13161<br>1750-13131  | 1    |          | 72         | O-ring<br>Ring                   | 1751-81240<br>1751-81130   | 1    |               |
| 8          | Screw                        | 0260-30520                | 2    |          | 73         | Swivel                           | 1881-81140   | 1    |               |
| 9          | Screw                        | 0260-30555                | 2    |          | 74         | Plug                             | 1881-81180   | 1    |               |
| 10         | Gasket                       | 1140-13140                | 1    |          | 75         | Valve ass'y                      | 1881-81150   | 1    |               |
| 11         | Muffler ass'y                | 1751-15101                | 1    |          | 76         | Screw                            | 1752-81110   | 2    |               |
| 12         | Spark arrester               | 1601-15120                | 1    |          | 77         | Bracket                          | 1891-81130   | 1    | · ·           |
| 13         | Nut                          | 3320-15310                | 2    |          | 78         | Nut                              | 1751-81180   | 1    |               |
| 14         | Cover                        | 1751-15210                | 1    |          | 79         | Screw                            | 1918-81170   | 1    |               |
| 15         | Screw                        | 0260-20408                | 3    |          | 80         | Ring                             | 1881-81130   | 1    |               |
| 16         | Crankcase comp.              | 1772-21100                | 1    |          | 81         | Screw                            | 1850-81530   | 4    |               |
| 17         | Gasket<br>Seal               | 1140-21140                | 1    |          | 82         | Cap                              | 1601-81810   | 1    |               |
| 18<br>19   | Sear<br>Bearing              | 1140-21210<br>06030-06001 | 1 2  |          | 83<br>84   | Cleaner ass'y                    | 1751-82002   | 1    |               |
| 20         | Snap ring                    | 04065-02812               | 1    |          | 85         | Housing<br>Cover                 | 1751-82012   | 1    |               |
| 21         | Seal                         | 1850-21220                |      |          | 86         | Lever                            | 1751-82041<br>1750-82070   | 1    |               |
| 22         | Screw                        | 0280-00530                | 4    |          | 87         | Filter                           | 1750-82070   | 1    |               |
| 23         | Case                         | 1779-21160                | 1    |          | 88         | Washer                           | 1750-82020   |      |               |
| 24         | Screw                        | 0260-30525                | 4    |          | 89         | Sleeve                           | 1750-82080   | 2    |               |
| 25         | Plate                        | 1772-56111                | 1    |          | 90         | Label                            | 1133-82080   | 1    |               |
| 26         | Cover                        | 1140-31111                | 1    |          | 91         | Cable comp.                      | 1779-82101   | 1    |               |
| 27         | Screw                        | 0260-00414                | 4    |          | 92         | Clamp                            | 1140-72231   | 1    |               |
| 28         | Cover                        | 1754-32210                | 1    |          | 93         | Bracket                          | 1750-72241   | 1    |               |
| 29         | Screw                        | 0260-20408                | 2    |          | 94         | Switch wire                      | 1372-72250   | 1    |               |
| 30         | Piston                       | 1140-41110                | 1    |          | 95         | Clamp                            | 1140-72231   | 1    |               |
| 31         | Piston ring                  | 1100-41210                | 2    |          | 96         | Spark plug                       | 1115-73111   | 1    | RCJ8          |
| 32         | Piston pin                   | 1101-41310                | 1    |          | 97         | Starter ass'y                    | 1140-75101   | 1    |               |
| 33<br>34   | Snap ring<br>Bearing         | 1101-41320<br>1140-41330  | 1    |          | 98         | Reel                             | 1140-75211   | 1    |               |
| 35         | Thrust washer                | 1101-41340                | 2    |          | 100        | Ratchet<br>Spring                | 1130-75230   | 1    |               |
| 36         | Crankshaft comp.             | 1150-42000                | 1    | ·        | 101        | Plate                            | 1130-75220<br>1130-75241   | 1    |               |
| 37         | Nut                          | 1650-43230                | 1    |          | 102        | Spring                           | 1130-75251   | 1    |               |
| 38         | Key                          | 1000-43240                | 1    |          | 103        | Screw                            | 1130-75260   | 1    |               |
| 39         | Shim                         | 1140-43250                | 0-1  |          | 104        | Rope                             | 1140-75311   | 1    |               |
| 40         | Bolt                         | 0224-30614                | 1    |          | 105        | Knob                             | 1140-75320   | 1    |               |
| 41         | Shoe                         | 1140-51110                | 2    |          | 106        | Spring                           | 1140-75270   | 1    |               |
| 42         | Screw                        | 1140-51250                | 2    |          | 107        | Label                            | 1711-75410   | 1    |               |
| 43         | Spring                       | 1122-51221                | 1    |          | 108        | Screw                            | 0280-30412   | 4    |               |
| 44         | Washer                       | 1140-51230                | 2    |          | 109        | Tank ass'y                       | 1710-85000   | 1    |               |
| 45         | Washer                       | 1140-51242                | 2    | <u> </u> | 110        | Cap ass'y                        | 1601-85200   | 1    |               |
| 46         | Plate                        | 1772-55310                | 1    |          | 111        | Valve comp.                      | 1600-85302   | 1    |               |
| 47         | Rotor<br>Coil                | 1750-71110                | 1    |          | 112        | Pipe comp.                       | 1710-85600   | 1    |               |
| 49         | Unit                         | 1750-71120<br>1750-71500  | 1    |          | 113        | Filter ass'y                     | 1850-85300   | 1    |               |
| 50         | Grommet                      | 1140-72110                | 1    |          | 114        | Clip<br>Screw                    | 1260-85460<br>1750-86120   | 1    |               |
| 51         | Cap                          | 1100-72213                | 1    |          | 118        | Bracket                          | 1772-86223   | 1    |               |
| 52         |                              | 1900-72120                | 1    |          | 117        | Screw                            | 0280-30512   | 1    |               |
| 53         | Screw                        | 0260-20512                | 2    |          | '''        |                                  | 2230 30312   | '    |               |
| 54         | Screw                        | 0260-10420                | 2    | }        |            |                                  |  | 1    |               |
| 55         | Carburetor ass'y             | 1779-81001                | 1    | WYJ-65   |            |                                  |  |      |               |
| 56         | Pump body                    | 1794-81450                | 1    |          |            |                                  |  |      |               |
| 57         | Screen                       | 3306-81380                | 1    |          |            |                                  |  |      |               |
| 58         | Inlet valve                  | 3356-81310                | 1    |          |            |                                  |  |      |               |
| 59         | Spring                       | 1794-81270                | 1    |          |            |                                  |  |      |               |
| 60         | Screw                        | 1850-81220                | 1    |          |            |                                  |  |      |               |
| 61         | Pin                          | 3310-81250                | 1    |          |            |                                  |  |      |               |
| 62         | Lever                        | 3310-81230                | 1    |          |            |                                  |  |      |               |
| 63<br>64   | Air purge body<br>Pump cover | 1850-81490<br>1850-81520  | 1    |          | 204        | Buller cost:                     | 1140 00155   | _    |               |
| 65         | Primer pump                  | 1751-81510                | 1    |          | 201        | Puller ass'y<br>Piston pin guide | 1140-98100<br>1101-98220   | 1    | Optional part |
| ",         | i ilinoi pullip              | 1751-01510                | '    |          | 202        | r iaton pin guide                | 1101-90220   | 1    | Optional part |
|            |                              |                           |      | J        |            |                                  | - COMPANIE CONTRACTOR OF THE C |      |               |

# RedMax HEDGE-TRIMMER MODELS HT232/HT232L/CHT232B/CHT232L 2-YEAR LIMITED WARRANTY

For two(2) years of home use[one(1) year for any other use] from the date of original purchase of the model HT232, HT232L,CHT232B, or CHT232L unit, KOMATSU ZENOAH AMERICA INC.(the "Company"), through any RedMax dealer, will repair or replace, free of charge, for the original purchaser, any part or parts found to be defective in material and/or workmanship. This is the exclusive remedy.

The purchaser shall bear costs of transporting the unit to and from the RedMax dealers.

This warranty does not apply to those units which have been damaged by negligence of instructions listed in the Owner/Operator Manual for proper use and maintenance of the unit, accident, mishandling, alteration, abuse, improper lubrication, use of any parts or accessories other than those specified by the Company, or other causes beyond the Company's control.

This warranty does not cover those parts replaced by normal wear or harmless changes in their appearance.

There are no other express warranties.

Implied warranties including those of merchantability and fitness for a particular purpose are limited to one(1) year from the original purchase date.

Liabilities for incidental or consequential damages under any and all warranties are excluded.

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

IMPORTANT: You will receive a Warranty Registration Card at time of purchase. Please keep the card and attach it when sending your unit in for a repair.



KOMATSU ZENOAH AMERICA INC. 1505 Pavilion Place Suite A Norcross, Georgia 30093